

## REMARKS/ARGUMENTS

Reconsideration of this Patent Application is respectfully requested in view of the following remarks. Claim 1 has been amended. No new matter has been added.

The Examiner rejected claims 1-6 and 8 under 35 U.S.C. §102 as being anticipated by Lord et al. Applicant respectfully traverses. Applicant has amended claim 1 to further clarify the invention. In particular, Applicant has amended claim 1 to state that the reaction gas is prevented from entering the heating zone. Support for this amendment can be found in the specification, on page 7, last paragraph: "This is because there cannot be any wall deposition in the heating zone, because there is not silicon-containing gas in that zone." This amendment clarifies that the heating and reaction zones are separate: heating does not take place in the reaction zone, and the reaction does not take place in the heating zone. This is in direct contrast to Lord, where heating and reaction take place throughout the entire reactor.

In Lord, the gas distribution devices 112, 115, 143 are at the bottom of the reactor (see Fig. 6). The beads 102 are also at

the bottom of the reactor. The heater is also at the bottom of the reactor, so the reaction takes place at the bottom of the reactor, too. This is affirmed in column 26, lines 63 to 66, where it states that the incoming gases 113, 115 and 143 are heated and reacted with the beads. Thus, in the lower part of the reactor (below inlet 125), there are the beads, the reaction gases and the heater. Therefore, the reaction takes place in that area, too.

According to column 35, lines 56 to 58 of Lord, the inlet 125 addresses the fine control of the particle size distribution in the reactor. This has nothing to do with the division of the reactor in a heating and a reaction zone. This difference between the reactor of Lord and the reactor of the present invention is obvious if Fig. 2 of Lord is compared with Fig. 1 of the present invention. According to Fig. 1 of the present invention, the heating by heater 14 takes place in the lower part of the reactor, whereas the reaction gas 7 is given into the reactor through the inlet 6 into the area above the heating zone. In the heating zone there are only the fluidizing gas and the silicon beads, which are fluidized by the fluidizing gas and heated by the heater. In the area of the reaction zone (above the heating

zone), the hot fluidized Si beads react with the reaction gas only in this area.

According to Fig. 2 or Fig. 6 of Lord, the reaction gas as well as the Si-beads as well as the heating device are present in the lower part of the reactor. So the reaction already takes place in the lower part of the reactor. Moreover, the heater 129 extends from the top of the reactor to the bottom of the reactor (see Fig. 2). So the heater is also present above inlet 125. This shows that inlet 125 does not divide the reactor into a heating and a reaction zone. According to Lord, heating and reaction take place throughout the whole reactor, and there is no separation between the heating and reaction zones.

As can be seen from Fig. 2 of Lord, the heater 129 is in direct contact with the reactor vessel 101. At least in the area that the Examiner states is the reaction zone 120, the heater 129 is in direct contact with the wall of the reactor vessel. According to the present invention, the heating takes place solely in the heating zone. In the reaction zone there is no heating at all.

Therefore, Lord discloses a completely different reactor which does not show a division between a heating zone and a reaction zone. According to the present invention, the heating takes place solely in the heating zone. There is no further heating in the reaction zone, and the reaction takes place solely in the reaction zone (due to the inlet device 6 which supplies the reaction gas above the heating zone only into the reaction zone).

Such a clear division of the reactor between the part where the heating takes place and the part where the reaction takes place is not disclosed by Lord. The heating in Lord takes place in the area 120, too, so this in any case is a "heating zone" too. The inlet of the reaction gas is at the bottom of the reactor, so the reaction gas is in the whole reactor and therefore the whole reactor is a reaction zone, too. There is no division between a heating zone (where only the heating takes place) and a reaction zone (where the reaction takes place without further external heating) disclosed by Lord.

Accordingly, Applicant submits that claims 1-6 and 8, as well as allowed claim 7, are patentable over the cited

references, taken either singly or in combination. Early allowance is respectfully requested.

Respectfully submitted,  
DIETER WEIDHAUS ET AL.



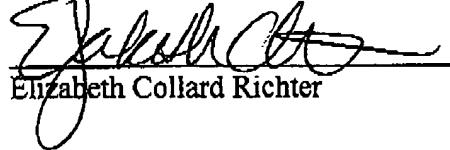
COLLARD & ROE, P.C.  
1077 Northern Boulevard  
Roslyn, New York 11576  
(516) 365-9802  
ECR:djp

Allison C. Collard, Reg.No.22,532  
Elizabeth C. Richter, Reg.No.35,103  
Frederick J. Dorchak, Reg.No.29,298  
Attorneys for Applicants

**CERTIFICATE OF FACSIMILE TRANSMISSION**

Fax No. 571-273-8300

I hereby certify that this correspondence is being sent by facsimile-transmission to the Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on September 29, 2005.

  
Elizabeth Collard Richter